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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/767,787	01/29/2004	Kevin J. Ash	TUC920030124US1 (16972)	7287
46263 7590 12/22/2006 SCULLY, SCOTT, MURPHY, & PRESSER 400 GARDEN CITY PL GARDEN CITY, NY 11530			EXAMINER DINH, NGOC V	
			ART UNIT 2189	PAPER NUMBER
SHORTENED STATUTORY PERIOD OF RESPONSE			MAIL DATE	DELIVERY MODE
3 MONTHS			12/22/2006	PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

**Office Action Summary**

Application No.

10/767,787

Applicant(s)

ASH ET AL.

Examiner

NGOC V. DINH

Art Unit

2189

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 03 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 29 January 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-26 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-6, 10-15 and 18-23 is/are rejected.
- 7) ☒ Claim(s) 7-9, 16-17, 24-26 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 29 January 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)  | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date <u>01/29/2004</u> . | 6) <input type="checkbox"/> Other: _____  |

### DETAILED ACTION

1. This office action is a response to the U.S. application Serial No. 10/767787 filed on 06/03/04. Claims 1-26 are presented for examination.

### INFORMATION DISCLOSURE STATEMENT

2. The Applicant's submission of the IDS filed 08/11/2003 have been considered. As required by M.P.E.P. 609 C(2), a copy of the PTOL-1449 is attached to the instant office action.

### *Claims Objection*

3. Claim 25 is object to because of the incorrect dependence. Claim 25 should depend on claim 24 instead of claim 18. There is no limitation of "Flag" in claim 18.

### *Claim Rejections - 35 USC § 102*

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

4. Claims 1-6, 10-15, 18-23 are rejected under 35 U.S.C.102 (e) as being anticipated by Pasupathy US 2004/0088336.

Pasupathy teaches:

**Per claims 1-2, 10-11, 18-19** a method for storing customer data at a non-volatile storage (NVS) at a storage server [fig. 1-3], comprising: initializing the NVS, prior to receiving a first/second write request at the storage server for writing first customer data to the NVS [prior to receiving the write command, allocating the virtual pool of disk blocks for the client from a server, page 3/claim 2; initial/initially, page 2/[0030]; page 3/0044]], by allocating first segments in the NVS for storing data [page 2/[0033]; page 3/[0040]]; and in response to receiving the first write

Art Unit: 2189

request, allocating second/third segments [additional, more disk block, page 2/[0029]; page 3/[0045]; page 4/claim 7] in the NVS for storing second customer data.

**Per claims 3, 12, 20:** maintaining a cache control block for allocating the first and second segments in the NVS [page 3/[0042]].

**Per claims 4, 13, 21:** maintaining a virtual track buffer for allocating the first and second segments in the NVS [page 1/[0010, 0015], virtual pool].

**Per claims 5, 14, 22:** the first write request is received at a cache at the storage server from a host adapter at the storage server [server file buffer cache, page 3/0040]]. A cache memory is a fast access memory and keeps copies of data and address pointers that are most likely to be accessed next by the processor. The request is sent first to the cache instead to the slow sluggish storage server.

**Per claims 6, 15, 23:** following commit processing of the first customer data at the NVS, the NVS prepares to use the second segments to store the second customer data for a subsequent write request [commit, acknowledgement, [page 2/[0036-0037]; page 3/[0048].

***Allowable Subject Matter***

5. Claims 7-9, 16-17, 24-26 are objected to as being dependent upon a rejected base claims, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

***Conclusion***

**6. Any response to this action should be mailed to:**

Under Secretary of Commerce for intellectual Property and Director of the  
United States Patent and Trademark Office

PO Box 1450

Alexandria, VA 22313-1450

Art Unit: 2189

**or faxed to:**

(571) 273-8300, (for Official communications intended for entry)

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PMR) system. Status information for published Applications may be obtained from either Private PMR or Public PMR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pak-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ngoc Dinh whose telephone number is (571) 272-4191. The examiner can normally be reached on Monday-Friday 8:30 AM-5:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Reginald Bragdon, can be reached on (571) 272-4204.

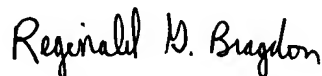


NGOC DINH

Patent Examiner

ART UNIT 2189

December 18, 2006



REGINALD BRAGDON  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 2100